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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,414	04/03/2001	Alan Collmer	19603/3243 (CRF D-2601C)	2043

7590

09/04/2003

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EXAMINER

MAYES, LAURIE A

ART UNIT	PAPER NUMBER
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1653

DATE MAILED: 09/04/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/825,414

Applicant(s)

COLLMER ET AL.

Examiner

Laurie Mayes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-9 and 38-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-9 and 38-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The applicant's amendment filed on April 23, 2003 has been entered. Claims 1-6 and 10-37 are canceled. Claims 7-9 and 38-45 are pending.

The restriction requirement was made FINAL in paper #9. The applicant's arguments in paper #11 are unpersuasive for the same reasons as stated in paper #9. The traversal is on the ground(s) that that SEQ ID NOS: 7 and 66 should be examined together because they are closely related as evidenced by their 78% alignment match. This is not found persuasive because the claims are not closely related. The claims are drawn to distinct inventions such as an expression system comprising nucleic acids, cells and transformed plants, a protein, a method of transforming a plant with a nucleic acid, a method of preventing disease in plants by administering a protein, methods of making a plant hypersusceptible to colonization by bacteria by transformation with nucleic acids or proteins, and methods of inducing cell death with a protein, a method of treating cancer with a protein and nucleic acid. Further, SEQ ID NO: 7 and SEQ ID NO: 66 differ by 22% and result in different structures and functions and are different inventions. Therefore, the restriction requirement is still deemed proper and is therefore made FINAL.

The rejection under 35 U.S.C. 102(b) in paper #9 is withdrawn.

Information Disclosure Statement

The information disclosure statement filed on February 20, 2003 (paper # 10) fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information

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referred to therein has not been considered but for US 6,342,654. Consideration of the remaining documents will be done when the cited documents are provided.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7-9, 38-42, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAF71504 (Submitted 07-FEB-2000; Alfano and Collmer, Dept. Biol. Sci, UNLV, 1854 Maryland Parkway, Las Vegas, NV 89154, USA) in view of Klessig et al. (US 5,939,601). AAF71504 teach an isolated peptide comprising an amino acid sequence of SEQ ID NO: 7 (present claims 7, 8, 38, 42, 43, 45). AAF71504 does not teach hybridization at 37-42 or 65 degrees C in at most about 0.9M SSC or a composition comprising a carrier and SEQ ID NO: 7.

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Klessig et al. teach a peptide encoded by a nucleic acid molecule (present claim 8) whose complement hybridizes at 37-42 degrees C (col. 7, lines 2-4) in at most 0.9 M SSC (col. 6, lines 65-68)(present claims 7, 41, 42, 45) wherein the peptide is at least 90-95% pure (col. 2, line 67 and col. 3, lines 1-13)(present claims 39, 40) and a carrier (col. 10, lines 63-68)(present claims 9, 44, 45). Klessig et al. do not teach an amino acid sequence comprising SEQ ID NO: 7.

Given that hybridization at 37-42 degrees C in at most 0.9M SSC for encoding a peptide by a nucleic acid is known in the art and given that SEQ ID NO: 7 is known, it would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to recombinantly make the peptide of SEQ ID NO: 7 using the method taught by Klessig et al. as recombinant methods have the advantages of higher levels of protein purity and are often cheaper than isolating or purifying peptides from natural sources.

Claims 7-9 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAF71504 (Submitted 07-FEB-2000; Alfano and Collmer, Dept. Biol. Sci, UNLV, 1854 Maryland Parkway, Las Vegas, NV 89154, USA) in view of Avraham et al. (US 6,066,451). AAF71504 teach an isolated peptide comprising an amino acid sequence of SEQ ID NO: 7 (present claims 7, 8, 38, 42, 43, 45). AAF71504 does not teach hybridization at 37-42 or 65 degrees C in at most about 0.9M SSC or a composition comprising a carrier and SEQ ID NO: 7.

Avraham et al. et al. teach a peptide encoded by a nucleic acid molecule (present claim 8) whose complement hybridizes at 65 degrees C (col. 2, lines 55-56) in at most 0.9 M SSC (col. 2, lines 52, 55)(present claims 1, 44) and a carrier to administer the polypeptide (col. 4, lines 14-20)(present claims 9, 44). Avraham et al. do not teach an amino acid sequence comprising SEQ ID NO: 7.


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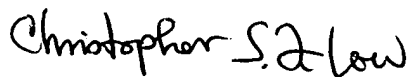
Given that hybridization at 65 degrees C in at most 0.9M SSC for encoding a peptide by a nucleic acid is known in the art and given that SEQ ID NO: 7 is known, it would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to recombinantly make the peptide of SEQ ID NO: 7 using the method taught by Avraham et al. as recombinant methods have the advantages of higher levels of protein purity and are often cheaper than isolating or purifying peptides from natural sources and to include a carrier for administration of the polypeptide.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Mayes whose telephone number is (703) 605-1208. The examiner can normally be reached on Monday through Friday from 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on (703) 308-2923. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1123.


Laurie Mayes
Patent Examiner
Art Unit 1653



**CHRISTOPHER S. F. LOW
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